



National Environmental Leadership Award in Asthma Management 2007

MaineHealth AH! Asthma Health Program



Who We Are

Nonprofit, integrated health care delivery system, serving 10 counties and 975,000 residents in Maine, including 90,675 with asthma.

Our Asthma Management Program

The MaineHealth's AH! Asthma Health Program combines standards-based clinical care with robust indoor and outdoor environmental asthma management. The AH! Program has built strong relationships with a homeless clinic, school-based health centers, day care centers, public health departments, and employers. Education, both for providers and patients, is a central part of the program. Patient education is culturally appropriate for MaineHealth's growing foreign-language populations. Specially-trained nurse care managers "embedded" in primary care physician practices play a key role in referring patients to asthma education specialists and monitoring their condition. One challenge to optimal asthma care is varied knowledge and practice among primary care physicians. The AH! Program created advisory committees to provide regular communication and coordination. The Asthma Clinical Advisory Group represents clinicians. The group reviews materials and disseminates best practices. The AH! Program also provides learning opportunities, including Learning Collaboratives. The AH! Program has developed a funding model that has sustained the program's asthma educators for 8 years: 1/3 from MaineHealth, 1/3 from the host hospital, and 1/3 from income generated by the asthma specialists for direct patient care.

Managing Asthma Triggers

Maine's high ozone rates and wide use of wood-burning heating appliances contribute to poor outdoor and indoor air quality. The AH! Program provides a comprehensive exposure assessment for all enrolled patients by nurse care managers, visiting nurses that are part of the MaineHealth system, or trained community health outreach workers in immigrant communities. Through a partnership with a major employer, the AH! Program provided on-site education to employees, emphasizing workplace exposures. The AH! Program has a history of advocacy in support of municipal, state, and national public policy actions—such as bans on tobacco smoke in public places—that create asthma-friendly environments.

Results to Date

- ▶ A comprehensive measurement scheme evaluates outcomes for various populations.
- ▶ Reductions at 6 months post-intervention are sustained over time (69% reduction in ER visits; 29% reduction in hospitalizations).
- ▶ Measures are incorporated in a Clinical Improvement Registry (CIR) which clinicians use to track data points and MaineHealth uses as the basis for financial incentives for physician practices. The CIR measurably improved care of pediatric asthma patients.
- ▶ Achieved 2006 avoided health care costs of \$473,105 (ER and hospitalizations).

Lessons Learned

- ▶ Effective asthma management requires interventions in clinical and community settings. Wagner's Care Model and the social-ecological model provide a framework.
- ▶ Emphasis on measuring and reporting outcomes has enabled expansion of the program and ability to leverage funding.
- Collaborations and partnerships strengthen the program, further its reach, and support development of effective interventions.
- ▶ Use of evidence-based tools for patients, providers, and the public has increased awareness, improved diagnoses and treatment, and strengthened public policies.
- Working with payers, public health, and environmental organizations to establish reimbursable environmental interventions has raised awareness and improved health outcomes.
- Sustainability can be achieved by developing mechanisms to charge payers for asthma education in inpatient and outpatient settings, reward providers for outcomes, and reach out to partners in the community.

Replicating Success

- Use grant funding for seed money to speed dissemination of the program; use outcome data to secure other ongoing funding sources.
- Convene a multi-disciplinary advisory workgroup to provide direction and feedback and hire a core staff.
- ▶ Ensure that the program is founded on NHLBI guidelines for asthma and supported by a solid framework (e.g., Care Model).
- Establish measurable goals and objectives.
- ▶ Partner with public and private sector organizations and coordinate efforts within the health care community.
- Work with statewide organizations to support asthma-friendly public policies.